Title (en)

HIGH-STRENGTH STEEL SHEET, METHOD FOR MANUFACTURING SAME, HIGH-STRENGTH MOLTEN-ZINC-PLATED STEEL SHEET, AND METHOD FOR MANUFACTURING SAME

Title (de)

HOCHFESTES STAHLBLECH, VERFAHREN ZUR HERSTELLUNG DAVON, HOCHFESTES STAHLBLECH AUS SCHMELZFLÜSSIGEM ZINK UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

TÔLE D'ACIER AVEC HAUTE RÉSISTANCE MÉCANIQUE AINSI QUE PROCÉDÉ DE FABRICATION DE CELLE-CI, ET TÔLE D'ACIER GALVANISÉE EN ZINC FONDU AVEC HAUTE RÉSISTANCE MÉCANIQUE AINSI QUE PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication

EP 2940176 A1 20151104 (EN)

Application

EP 14760083 A 20140228

Priority

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- JP 2013042456 A 20130305
- JP 2014001082 W 20140228

Abstract (en)

Provided is a high-strength steel sheet that has good chemical convertibility and good corrosion resistance after electro deposition painting despite high Si and Mn contents. Also provided are a method for producing the high-strength steel sheet, a high-strength galvanized steel sheet formed by using the high-strength steel sheet, and a method for producing the high-strength galvanized steel sheet. A steel sheet containing, in terms of % by mass, C: 0.03 to 0.35%, Si: 0.01 to 0.50%, Mn: 3.6 to 8.0%, Al: 0.001 to 1.00%, P #¤ 0.10%, S #¤ 0.010%, and the balance being Fe and unavoidable impurities is annealed under condition under which a dew point of an atmosphere in a temperature zone of 550°C or higher and A°C or lower (A is a particular value that satisfies 600 #¤ A #¤ 750) inside an annealing furnace is controlled to -40°C or lower.

IPC 8 full level

C21D 8/02 (2006.01); **B32B 15/01** (2006.01); **C21D 1/26** (2006.01); **C21D 1/76** (2006.01); **C21D 6/00** (2006.01); **C21D 8/04** (2006.01); **C21D 9/46** (2006.01); **C22C 18/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C23C 2/02** (2006.01); **C23C 2/06** (2006.01); **C23C 2/28** (2006.01); **C23F 17/00** (2006.01); **C25F 1/06** (2006.01)

CPC (source: EP US)

B32B 15/013 (2013.01 - EP US); **C21D 1/26** (2013.01 - EP US); **C21D 1/76** (2013.01 - EP US); **C21D 6/001** (2013.01 - US); **C21D 6/002** (2013.01 - US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - US); **C21D 9/46** (2013.01 - EP US); **C22C 18/00** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US); **C23C 2/02** (2013.01 - EP US); **C23C 2/0224** (2022.08 - EP US); **C23C 2/024** (2022.08 - EP US); **C23C 2/06** (2013.01 - EP US); **C23C 2/28** (2013.01 - EP US); **C23F 17/00** (2013.01 - US); **C25F 1/06** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

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Designated extension state (EPC)

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